



Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

(use as many sheets as necessary)

Applicati n Number	10/764,691
--------------------	------------

Filing Date	January 26, 2004
--------------------	-------------------------

First Named Inventor	Bowling
----------------------	---------

Group Art Unit	1651
----------------	------

Examiner Name	S.M. Hanley
---------------	-------------

Attorney Docket Number	49122-0142 (297109)
------------------------	---------------------

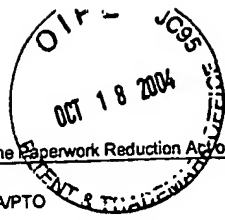
Sheet	1	of	1
-------	---	----	---

[illegible][illegible]

/Susan Hanley/ (06/25/2006)

Date Considered

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.



PTO/SB/08A (08-00)

Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete If Known

Application Number	10/764,691
Filing Date	January 26, 2004
First Named Inventor	Gary L. B wlin
Group Art Unit	1651
Examiner Name	Not Yet Assigned
Attorney Docket Number	49122-0142 (49122-297109))

Sheet 1 of 13

U.S. PATENT DOCUMENTS

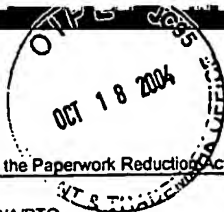
Examiner Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
SH	1.	US2001/0003148	A1	Coffee	06-07-2001	
	2.	1,975,504		A. Formhals	10-02-1934	
	3.	3,892,648		Phillips et al.	07-01-1975	
	4.	4,043,331		Martin et al.	08-23-1977	
	5.	4,044,404		Martin et al.	08-30-1977	
	6.	4,294,677		Sakagami et al.	10-13-1981	
	7.	4,552,707		How	11-12-1985	
	8.	4,657,793		Fisher	04-14-1987	
	9.	4,738,740		Pinchuk et al.	04-19-1988	
	10.	5,171,505		Lock	12-15-1992	
	11.	5,252,285		Lock	10-12-1993	
	12.	5,256,418		Kemp et al.	10-26-1993	
	13.	5,292,362		Bass et al.	03-08-1994	
	14.	5,580,859		Felgner et al.	12-03-1996	
	15.	5,655,517		Coffee	08-12-1997	
	16.	5,693,085		Buirge et al.	12-02-1997	
	17.	5,723,324		Bowlin et al.	03-03-1998	
	18.	5,813,614		Coffee	09-29-1998	
	19.	5,902,741		Purchio et al.	05-11-1999	
	20.	5,906,934		Grande et al.	05-25-1999	
	21.	5,908,777		Lee et al.	06-01-1999	
	22.	5,912,177		Turner et al.	06-15-1999	
	23.	5,915,377		Coffee	06-29-1999	
	24.	5,935,437		Whitmore	08-10-1999	
	25.	5,948,654		Tranquillo et al.	09-07-1999	
	26.	6,057,137		Tranquillo et al.	05-02-2000	
	27.	6,068,199		Coffee	05-30-2000	
	28.	6,093,557		Pui et al.	07-25-2000	
	29.	6,096,309		Prior et al.	08-01-2000	
	30.	6,100,026		Nova et al.	08-08-2000	
	31.	6,103,255		Levene et al.	08-15-2000	
	32.	6,105,571		Coffee	08-22-2000	
	33.	6,105,877		Coffee	08-22-2000	
	34.	6,106,913		Scardino et al.	08-22-2000	
	35.	6,110,484		Sierra	08-29-2000	
	36.	6,110,590		Zarkoob et al.	08-29-2000	
	37.	6,117,296		Thomson	09-12-2000	

Examiner
Signature

/Susan Hanley/ (06/25/2006)

Date
Considered

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents.



PTO/SB/08A (08-00)

Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	10/764,691
Filing Date	January 26, 2004
First Named Inventor	Gary L. Bwlin
Group Art Unit	1651
Examiner Name	Not Yet Assigned
Attorney Docket Number	49122-0142 (49122-297109)

Sheet 2 of 13

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
SH	38.	6,121,042		Peterson et al.	09-19-2000	
	39.	6,146,892		Ma et al.	11-14-2000	
	40.	6,179,872	B1	Bell et al.	01-30-2001	
	41.	6,180,605	B1	Chen et al.	01-30-2001	
	42.	6,180,606	B1	Chen et al.	01-30-2001	
	43.	6,190,893	B1	Shastri et al.	02-20-2001	
	44.	6,197,575	B1	Griffith et al.	03-06-2001	
	45.	6,245,345	B1	Swanbom et al.	06-12-2001	
	46.	6,252,129	B1	Coffee	06-26-2001	
	47.	6,254,627	B1	Freidberg	07-03-2001	
	48.	6,265,333	B1	Dzenis et al.	07-24-2001	
	49.	6,306,424	B1	Vyakarnam et al.	10-23-2001	
	50.	6,308,509	B1	Scardino et al.	10-30-2001	
	51.	6,309,661	B1	Setterstrom et al.	10-30-2001	
	52.	6,318,640	B1	Coffee	11-20-2001	
SH	53.	6,399,362	B1	Pui et al.	06-04-2002	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
-----------------------	-----------------------------	--------------------	--

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bwlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 3	of 13	Attorney Docket Number	49122-0142 (49122-297109)

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
SH	54.		RU2031661	C1	Nauchno-proizvodstvennoe predpriyatie "Ehkomedservis," Institut Khirurgii im. A. V. Vishnevskogo RAMN	03-27-1995		X
	55.	EP	00/05035	A1	Imperial Chemical Industries Limited, et al.	10-31-1979		
	56.	EP	0266035	A1	Ethicon, Inc., et al.	05-04-1988		
	57.	GB	1377022		Avicon, Inc.	12-11-1974		
	58.	GB	2142870		Ethicon, Inc. et al.	12-30-1985		
	59.	GB	2360789	A	Mason Christopher	10-03-2001		
	60.	PCT	WO 01/74431	A2	Electrosols, Ltd.	10-11-2001		
	61.	RU	2031661			03-27-1995	See XP002046663	
	62.	RU	2034534	C1	Kirichenko et al.	05-10-1995		
	63.	WO	00/67694	A1	Electrosols, Ltd.	11-16-2000		
	64.	WO	00/72857	A1	Bristol-Meyers Squibb Company	12-07-2000		
	65.	WO	01/26610	A1	The University of Akron	04-19-2001		
	66.	WO	01/27365	A1	The University of Akron	04-19-2001		
	67.	WO	01/51690	A1	Drexel University and The Trustees of the University of Pennsylvania	07-19-2001		
	68.	WO	91/01695	A1	Ethicon, Inc. et al.	02-21-1991		
	69.	WO	97/13849	A1	The Univ. of Akron	04-17-1997		
	70.	WO	98/03267	A	Electrosols, Inc.	01-29-1998		
SH	71.	WO	98/56894	A1	Regents of the Univ. of Minn.	12-17-1998		

The PTO did not receive the following
 listed item(s) References No. 54-95; 97; 99-108, 110;
112-118; 120-125; 127-129; 131-179

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
-----------------------	-----------------------------	--------------------	--

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO		Complete if Known	
		Application Number	10/764,691
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	49122-0142 (49122-297109)
Sheet	4	of	13

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	72.	"PlasmaSeal's Autologous Plasma Concentrate: Plasma Concentrate Sealant," http://www.plasmaseal.com/intro.htm , June 14, 2000, pp. 1-5.	
	73.	Abstract of RU 2034534, Kirichenko, et al. Derwent World Patents Inc., Dialog File No. 351 Accession No. 10521633	
	74.	Abstract of RU2031661, Nauchno-proizvodstvennoe predpriyatie "Ehkomedservis," Institut Khirurgii im.A.V.Vishnevskogo RAMN, Derwent, XP 00204663	
	75.	AGRAWAL, C.M. <i>et al.</i> , "Technique to Control pH in Vicinity of Biodegrading PLA-PGA Implants", J. Biomed. Mater Res., 1997, pp. 105-114, Vol. 38.	
	76.	AKINS, R.E. <i>et al.</i> , "Neonatal Rat Heart Cells Cultured in Simulated Microgravity", In Vitro Cell. Dev. Biol. - Animal, 1997, pp. 337-343, Vol. 33.	
	77.	AMSDEN <i>et al.</i> , "An examination of factors affecting the size, distribution and release characteristics of polymer microbeads made using electrostatics", Journal of Controlled Release, 1997, pp. 183-196, vol. 43.	
	78.	BAKER, T.L. <i>et al.</i> , "Three-Dimensional Culture of Bovine Chondrocytes in Rotating-Wall Vessels", In Vitro Cell. Dev. Biol. - Animal, 1997, pp. 358-365, Vol. 33.	
	79.	BAROFFIO, A. <i>et al.</i> , "Identification of self-renewing myoblasts in the progeny of single human muscle satellite cells", Differentiation, 1996, pp. 47-57, Vol. 60.	
	80.	BECK, L., Jr. <i>et al.</i> , "Vascular development: cellular and molecular regulation", J. FASEB, 1997, pp. 365-373, Vol. 11.	
	81.	BOHR, D.F. <i>et al.</i> , "The Cardiovascular System", Handbook of Physiology, American Physiological Society, 1980, pp. 1-31, Vol. II, sec. 2.	
	82.	BOLAND <i>et al.</i> , "Electrospinning of Tissue Engineering Scaffolds," Paper Presented at American Chemical Society Div. Of Polymeric Materials: Science and Engineering, Presented August 26, 2001, Chicago, IL, Publication approximately July 2001.	
SH	83.	BOLAND <i>et al.</i> , "Tailoring a Poly (Glycolic Acid) Tissue Engineering Scaffold by Utilizing Electrostatic Processing," Abstract of Presentation at the 4th International Symposium on Frontiers in Biomedical Polymers, Williamsburg, VA, May 16, 2001.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/APTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	49122-0142 (49122-297109)
Sheet	5	of	13

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	84.	BOWLIN et al., "Electric Field-Mediated Processing of Biomaterials: Toward Nanostructured Biomimetic Systems," Abstract of Presentation at SPIE Annual Meeting, Newport Beach, CA, presented March 8, 2001.	
	85.	BOWLIN et al., "Electrospinning of Biomaterials," Abstract for Presentation at the Second Conference on the Development of Technology in Medicine for Virginia, at the University of Virginia, Presented November 2, 1999.	
	86.	BOWLIN et al., "Electrospinning of Biomaterials," Paper for Presentation at Fiber Society Spring 2001 Meeting, Raleigh, NC, Presented May 23, 2001.	
	87.	BOWLIN et al., "Electrospinning of Biomaterials," Paper for Presentation at Fiber Society Spring 2001 Meeting, Raleigh, NC, Presented May 23, 2001.	
	88.	BOWLIN, G., "Biomimicking Small Caliber Vascular Construct Engineering," Abstract for Presentation at 2001 Whitaker Foundation Biomedical Engineering Conference, La Jolla, CA, Presented August 9, 2001.	
	89.	BOWLIN, G., "The New 'Spin' on Tissue Engineering Scaffolds," Abstract for Keynote Address at the 4th International Symposium on frontiers in Biomedical Polymers, Williamsburg, VA, Presented May 17, 2001.	
	90.	BUCHKO, C.J. et al., "Processing and Microstructural Characterization of Porous Biocompatible Protein Polymer Thin Films", Polymer, 1999, pp. 7397-7407, Vol. 40.	
	91.	BUSH, R.L. et al., "Regulation of new blood vessel growth into ischemic skeletal muscle", Journ. of Vascular Surgery, 1998, pp. 919-928, Vol. 28.	
	92.	CAVALLARO, J.F. et al., "Collagen Fabrics as Biomaterials", Biotechnology and Bioengineering, 1994, pp. 781-791, Vol. 43.	
	93.	CHEN, Da-Ren et al., "Electrospraying of Conducting Liquids for Monodisperse Aerosol Generation in the 4nm to 1.8µm Diameter Range", 1995, pp. 963-977. J. Aerosol Science, 1995, pp. 963-977, Vol. 26.	
	94.	CHEN, Da-Ren et al., "Experimental Investigation of Scaling Laws for Electrospraying: Dielectric Constant Effect", Aerosol Science and Technology, 1997, pp. 367-380, Vol. 27.	
SH	95.	CHEN, H.H., et al., "The Use of Collagen Polymer Tube and Fibrin Clot in Peripheral Nerve Repair," Proc. National Science Council (ROC), 1994, pp. 58-63, vol. 18, no.2.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Compleat if Kn wn	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inv ntor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 6	of 13	Attorney Docket Number	49122-0142 (49122-297109)

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	96.	COHN, Daniel et al., "Introducing a selectively biodegradable filament would arterial prosthesis: A short-term implantation study", Journ. of Biomed. Materials Res., 1992, pp. 1185-1204, Vol. 26	/
	97.	CONNOLD, A.L. et al., "Survival of embryonic cardiac myocytes transplanted into host rat soleus muscle", Journ. of Muscle Res. and Cell Motility, 1995, pp. 481-489, Vol. 16.	
	98.	DEITZEL, J.M. et al., "Generation of Polymer Nanofibers Through Electrospinning", Army Research Laboratory, 1999, pp. 1-33, ARL-TR-1989.	/
	99.	DOSHI, J. et al., "Electrospinning Process and Applications of Electrospun Fibers", Journ. of Electrostatics, 1995, pp. 151-160, Vol. 35.	
	100.	DRASLER, W. J. et al., "A Spun Elastomeric Graft for Dialysis Access", ASAIO Journal, 1993, pp. 114-119, Vol. 39.	
	101.	EKOMEDSERVIS: "WPI World Patent Information Derwent, Derwent, GB", WPI World Patent Information Derwent, Derwnet, GB, Vol. 44, Nr. 95, London, GB, (XP002046663)	
	102.	FERBER, D., "Lab-Grown Organs Begin to Take Shape", Science, 1999, pp. 422-424, Vol. 284.	
	103.	FREED, L.E. et al., "Microgravity Tissue Engineering", In Viro Cell. Dev. Biol. - Animal, 1997, pp. 381-385, Vol. 33.	
	104.	FREYSSINET, J-M, et al., "Fibrinogen and fibrin in strong magnetic fields. Complementary results and discussion," Biochimie, 1984, pp. 81-85, vol. 66.	
	105.	GERSHON, B. et al., "Utilization of composite laminate theory in the design of synthetic soft tissues for biomedical prostheses", Biomaterials, Casali Inst. of Applied Chemistry, Grad. School of Applied Science and Tech., The Hebrew Univ. of Jerusalem, Oct. 1990, pp.548-552, vol. 11, No. 8.	
	106.	GIBSON, P.W. et al., "Electrospun Fiber Mats: Transport Properties", U.S. Army Natick Research, Development and Engineering Center, AICHE Journal, 1999, pp. 190, Vol. 45.	
	107.	GOJO, S. et al., "Transplantation of Genetically Marked Cardiac Muscle Cells", Journ. of Thorac. Cardiovasc. Surg., 1997, pp. 10-18, Vol. 113.	
SH	108.	GORODETSKY, R., "Fibrin Microbeads (FMB) as biodegradable microcarriers for cultured cells and wound healing," ABSTRACT, http://www.Hadassah.org.il/hadasit/patent17.htm , June 14, 2000, pp.1.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 7	of 13	Attorney Docket Number	49122-0142 (49122-297109)

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	109.	GOSPODAROWICZ, D., et al., "The Extracellular Matrix and the Control of Proliferation of Vascular Endothelial and Vascular Smooth Muscle Cells," J. Supramolecular Structure, 1980, pp. 339-372, vol. 13.	/
	110.	HARRIS, A.K., et al., "Fibroblast traction as a mechanism for collagen morphogenesis", Nature, 1981, pp. 249-251, Vol. 290.	
	111.	HASEGAWA, M. et al., "Mechanical Properties of Synthetic Arterial Grafts", J. Biomechanics, 1979, pp. 509-517, Vol. 12	/
	112.	HERBERT, C.B., et al., "Effects of fibrin micromorphology on neurite growth from dorsal root ganglia cultured in three-dimensional fibrin gels," J. Biomed Mater Res., 1998, pp. 551-559, vol. 40.	
	113.	HIRAI, J. et al., "Highly Oriented, Tubular Hybrid Vascular Tissue for a Low Pressure Circulatory System", ASAIO Journal, 1994, pp. M383-M388, Vol. 40.	
	114.	HOPKINS, S.P. et al., "Controlled delivery of vascular endothelial growth factor promotes neovascularization and maintains limb function in a rabbit model of ischemia", Journ. Vascular Surgery, 1998, pp. 886-895, Vol. 27, no. 5.	
	115.	HOW, T.V. et al., "Engineering design of vascular prostheses", Proc Instn Mech Engrs, 1992, pp. 61-71, Vol. 206.	
	116.	HUANG, D. et al., "Mechanisms and Dynamics of Mechanical Strengthening in Ligament-Equivalent Fibroblast-Populated Collagen Matrices", Annals of Biomedical Engineering, 1993, pp. 289-305, Vol. 21.	
	117.	HUANG, L. et al., "Generation of Synthetic Elastin-Mimetic Small Diameter Fibers and Fiber Networks", Macromolecules, 2000, pp. 2989-2997, Vol. 33.	
	118.	HUANG, L. et al., "High-Resolution Analysis of Engineered Type I Collagen Nanofibers by Electron Microscopy," Scanning, 2001, pp.372-375, vol. 23.	
SH	119.	KANDA, K., et al., "Mechanical Stress-Induced Orientation and Ultrastructural Change of Smooth Muscle Cells Cultured in Three-Dimensional Collagen Lattices", Cell Transplantation, 1994, pp. 481-492, Vol. 3.	/
	120.	KATO, Y.P. et al., "Formation of continuous collagen fibres: evaluation of biocompatibility and mechanical properties", Biomaterials, 1990, pp. 169-175, Vol. 11.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Substitute for Form 1449/A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	49122-0142 (49122-297109)
Sheet	8	of	13

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	121.	KATO, Y.P. et al., "Mechanical properties of collagen fibres: a comparison of reconstituted and rat tail tendon fibres" Biomaterials, 1989, pp. 38-42, Vol. 10.	
	122.	KIM, B-S et al., "Engineering smooth muscle tissue with a predefined structure", J. Biomed. Mater. Res., 1998, pp. 322-332, Vol. 41.	
	123.	KIM, B-S et al., "Optimizing Seeding and Culture Methods to Engineer Smooth Muscle Tissue on Biodegradable Polymer Matrices", Biotechnology Bioengineering, 1998, pp. 46-54, Vol. 57.	
	124.	KOH, G.Y. et al., "Long-term survival of AT-1 cardiomyocyte grafts in syngeneic myocardium", Amer. Journ. Physiol., 1993, pp. H1727-H1733, Vol. 264.	
	125.	LI, R-K et al., "In Vivo Survival and Function of Transplanted Rat Cardiomyocytes", Circulation Research, 1996, pp. 283-288, Vol. 78, No. 2.	
	126.	MANDANAS, R.A., "Formation of fibrin clots in cryopreserved stem cell bags during thawing procedure: lack of impact on engraftment in autologous stem cell transplantation," Bone Marrow Transplantation, 1999, pp. 303-304, vol. 23.	/
	127.	MATTHEWS et al., "Electroprocessing: Fabrication of Novel Biocompatible Materials," Abstract for Presentation at the 4th International Symposium on Frontiers in Biomedical Polymers, Williamsburg, VA, Presented May 16, 2001.	
	128.	MATTHEWS et al., "Vascular Engineering Utilizing Electrospun Collagen," Abstract for Presentation at Engineering Tissues, Hilton Head Island, SC, February 24, 2001.	
	129.	MOLNAR, G. et al., "Skeletal Muscle Satellite Cells Cultured in Simulated Microgravity", In Vitro Cell. Dev. Biol. - Animal, 1997, pp. 386-391, Vol. 33.	
	130.	MOROZOV, V.N. et al., "Atomic force microscopy of structures produced by electrospraying polymer solutions", International Journal of Mass Spectrometry, 1998, pp. 143-159, Vol. 178.	/
SH	131.	MOROZOV, V.N. et al., "Electrospray Deposition as a Method to Fabricate Functionally Active Protein Films", Analytical Chemistry, April 1, 1999, pp. 1415-1420, Vol. 71, No. 7.	
	132.	MURRY, C.E. et al., "Skeletal Myoblast Transplantation for Repair of Myocardial Necrosis", Journ. Clin. Invest., 1996, pp. 2512-2523, Vol. 98, no. 11.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Completeness if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 9	of 13	Attorney Docket Number	49122-0142 (49122-297109)

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	133.	NIKLASON, L.E. et al., "Functional Arteries Grown in Vitro", Science, 1999, pp. 489-493, Vol. 284.	
	134.	OKANO et al., "Hybrid Muscular Tissues: Preparation of Skeletal Muscle Cell-Incorporated Collagen Gels," Cell Transplantation, 1997, pp. 109-118, Vol. 6, No. 2.	
	135.	OKANO, T. et al., "Tissue Engineered Skeletal Muscle: Preparation of Highly Dense, Highly Oriented Hybrid Muscular Tissue", Cell Transplantation, 1998, pp. 71-82, Vol. 7, No. 1.	
	136.	OKANO, T. et al., "Tissue Engineering of Skeletal Muscle, Highly Dense, Highly Oriented Hybrid Muscular Tissues Biomimicking Native Tissues", ASAIO Journal, 1997, pp. M749-M753, Vol. 43.	
	137.	PAWLOWSKI et al., "Electrospinning a Biodegradable Vascular Tissue Engineering Scaffold," Abstract for Presentation at the 4th International Symposium on Frontiers in Biomedical Polymers, Williamsburg, VA, Presented May 16, 2001.	
	138.	PELLEGRINI, G., et al., "The Control of Epidermal Stem Cells (Holoclones) in the Treatment of Massive Full-Thickness Burns with Autologous Keratinocytes Cultured on Fibrin," Transplantation, September 27, 1999, pp. 868-879, vol. 68, no. 6.	
	139.	PINS, G.D. et al., "Effects of Static Axial Strain on the Tensile Properties and Failure Mechanisms of Self-Assembled Collagen Fibers", J. Appl. Polym Sci., 1997, pp. 1429-1440, Vol. 63.	
	140.	PINS, G.D. et al., "Self-Assembly of Collagen Fibers Influence of Fibrillar Alignment and Decorin on Mechanical Properties", Biophysical Journal, 1997, pp. 2164-2172, Vol. 73.	
	141.	RENEKER, D.H. et al., "Nanometre diameter fibres of polymer, produced by electrospinning", Nanotechnology, 1996, pp. 216-223, Vol. 7.	
	142.	RODEO, S.A., "New and Emerging Treatments for Cartilage and Meniscus Injuries," MD Vista Journal of Medicine, 2000, pp. 1-4.	
	143.	ROHR, S. et al., "Patterned Growth of Neonatal Rat Heart Cells in Culture", Circulation Research, 1991, pp. 114-130, Vol. 68.	
SH	144.	SAMUEL, J.L. et al., "Mechanically Induced Orientation of Adult Rat Cardiac Myocytes In Vitro", In Vitro Cell. Dev. Biol., 1990, pp. 905-914, Vol. 26.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 10 of 13	Attorney Docket Number	49122-0142 (49122-297109)	

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	145.	SCHREUDER-GIBSON, H., "Electrospinning Polymer Fibers", www-sscom.army.mil/warrior/97/apr/yarn.htm, U.S. Army Natick Research, Development & Engineering Center, 1997.	
	146.	SELIKAR, D. et al., "Dynamic Mechanical Conditioning of Collagen-Gel Blood Vessel Constructs Induces Remodeling In Vitro", Annals of Biomedical Engineering, 2000, pp. 351-362, Vol. 28.	
	147.	SHANSKY, J. et al., "A Simplified Method for Tissue Engineering Skeletal Muscle Organoids In Vitro", In Vitro Cell. Dev. Biol.—Animal, 1997, pp. 659-661, Vol. 33.	
	148.	SHINOKA, T. et al., "Creation of Viable Pulmonary Artery Autografts Through Tissue Engineering", Journ. Thorac. Cardiovasc. Surg., 1998, pp. 536-546, Vol. 115.	
	149.	SIMPSON, D.G. et al., "Modulation of Cardiac Myocyte Phenotype In Vitro by the Composition and Orientation of the Extracellular Matrix", Journal of Cellular Physiology, 1994, pp. 89-105, Vol. 161.	
	150.	SOONPAA, M.H. et al., "Formation of Nascent Intercalated Disks Between Grafted Fetal Cardiomyocytes and Host Myocardium", Science, 1994, pp. 98-101, Vol. 264.	
	151.	STITZEL et al., "Electrospraying and Electrospinning of Polymers for Biomedical Applications. Poly (lactic-co-glycolic acid) and Poly (ethylene-co-vinylacetate)." Proc. 32nd Society for the Advancement of Material and Process Engineering (SAMPE) Meeting, Boston, MA, Presented Nov. 7, 2000.	
	152.	STITZEL, J., "Mechanical Design and Development of a Biomimicking, Biodegradable Vascular Graft, Thesis Submitted at Virginia Commonwealth University, Richmond, VA, August 2000, Indexed February 9, 2001.	
	153.	STITZEL, J.D., et al., "Arterial Smooth Muscle Cell Proliferation on a Novel Biomimicking, Biodegradable Vascular Graft Scaffold," J. Biomaterials Applications, 2001, pp. 1-12, vol. 15.	
	154.	TELEMCO, T. et al., "Electrospinning Applications in Bioengineering: Fabrication of Bio-Engineered Skeletal Muscle," Poster Presentation at Engineering Tissues, Hilton Head Island, SC, February 25, 2001. (Abstracts available February 21, 2001.)	
SH	155.	TIOILLIER, J. et al., "Fibroblast Behavior on Gels of Type I, III, and IV Human Placental Collagens", Experimental Cell Research, 1990, pp. 95-104, Vol. 191.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 11 of 13	Attorney Docket Number	49122-0142 (49122-297109)	

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH ↓ SH	156.	VAN WACHEM, P.B. et al., "Myoblast seeding in a collagen matrix evaluated in vitro", Journ. of Biomed. Materials Res., 1996, pp. 353-360, Vol. 30.	
	157.	VANDENBURGH, H. et al., "Attenuation of Skeletal Muscle Wasting with Recombinant Human Growth Hormone Secreted from a Tissue-Engineered Bioartificial Muscle", Human Gene Therapy, 1998, pp. 2555-2564, Vol. 9.	
	158.	VANDENBURGH, H., "Cell Shape and Growth Regulation in Skeletal Muscle: Exogenous Versus Endogenous Factors", Journ. of Cellular Physiology, 1983, pp. 363-371, Vol. 116.	
	159.	VANDENBURGH, H.H. et al., "Mechanically Induced Alterations in Cultured Skeletal Muscle Growth", J. Biomechanics, 1991, pp. 91-99, Vol. 24.	
	160.	VANDENBURGH, H.H. et al., "Skeletal muscle growth is stimulated by intermittent stretch-relaxation in tissue culture", American Journal of Physiology, 1989, pp. C674-C682, Vol. 256.	
	161.	VANDENBURGH, H.H., "Mechanical forces and their second messengers in stimulating cell growth in vitro", American Journal of Physiology, 1992, pp. R350-R355, Vol. 262.	
	162.	VANDENBURGH, H.H., "Mechanical stimulation of organogenic cardiomyocyte growth in vitro", Am. J. Physiol., 1996, pp. C1284-C1292, Vol. 270.	
	163.	VENTURA, R., et al., "Experimental Suture of the Peripheral Nerves with 'Fibrin Glue'," Ital. J. Orthop Traumatol, 1980, pp. 407-414, vol. 6 no. 3.	
	164.	WARNER, S.B., et al., "A Fundamental Investigation of the Formation and Properties of Electrospun Fibers," National Textile Center Annual Report, November 1999, pp. 1-10.	
	165.	WATANABE, E. et al., "Cardiomyocyte Transplantation in a Porcine Myocardial Infarction Model", Cell Transplantation, 1998, pp. 239-246, Vol. 7, no. 3.	
	166.	WEISS, S.W. et al., "Revascularization of Skeletal Muscle Transplanted into the Hamster Cheek Pouch: Electron Microscopy", Microvascular Research, 1983, pp. 65-73, Vol. 26.	
	167.	WILLIAMS, L., "Exogenous Fibrin Matrix Precursors Stimulate the Temporal Progress of Nerve Regeneration Within a Silicone Chamber," Neurochemical Research, 1987, pp. 851-860, vol. 12, no. 10.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Completeness of Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bowlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 12 of 13	Attorney Docket Number	49122-0142 (49122-297109)	

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	168.	WNEK, G., "Production of Microfibers by Electrospinning," Abstract for Presentation at Phillip Morris Technical Center, Richmond, VA, Presented February 13, 2001.	
	169.	WNEK, G., "Thinking Small About Old Polymers at the Medicine/Engineering Interface," Abstract for Presentation at Program in Polymer Science and Technology Seminar Series, Presented at Massachusetts Institute of Technology, Cambridge, MA, May 16, 2001.	
	170.	WNEK, G., "Thinking Small About Old Polymers at the Medicine/Engineering Interface," Abstract for Presentation at Chemical Engineering Seminar, Worcester Polytechnic Institute, Worcester, MA, Presented October 18, 2001.	
	171.	WNEK, G., "Electroactive Materials and Systems: Applications to Fuel Cells and Biosensors," Abstract for Presentation of Materials Science and Engineering Seminar, Virginia Polytechnic Institute and State University, Blacksburg, VA, Presented October 22, 1999. www.eng.vt.edu/eng/materials/seminars/fall99/wnek.html.	
	172.	WNEK, G., "Electrospinning of Biomaterials," Abstract of Presentation at University of Massachusetts Lowell Memorial Service and Technical Symposium Honoring Sukant K. Tripathy, Presented in Lowell, MA, February 16, 2001.	
	173.	WNEK, G., "Electroactive Materials and Systems: Applications to Fuel Cells and Biosensors", Abstract for Presentation at Molecular Geodesics, Inc., October 13 or 14, 1999.	
	174.	WNEK, G.E., Bowlin, G.L., and Simpson, D.G., "Electrospraying and Electrospinning of Polymers for Tissue Engineering/Biomaterials Applications." Abstract for Presentation at Poly Millennial 2000 an International Symposium by the Division of Polymer Chemistry/American Chemical Society, Hawaii, Presented December 10, 2000.	
	175.	WONG, W. H. et al., "Synthesis and Properties of Biodegradable Polymers Used as Synthetic Matrices for Tissue Engineering", Synthetic Biodegradable Polymer Scaffolds, 1997, pp. 51-82, Chp. 4.	
SH	176.	YE, QING, et al., "Fibrin gel as a three dimensional matrix in cardiovascular tissue engineering," European J. Cardio-thoracic Surgery, 2000, pp. 587-591, vol. 17.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/764,691
		Filing Date	January 26, 2004
		First Named Inventor	Gary L. Bwlin
		Group Art Unit	1651
		Examiner Name	Not Yet Assigned
Sheet 13 of 13	Attorney Docket Number	49122-0142 (49122-297109)	

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SH	177.	YEAGER, A. et al., "New Graft Materials and Current Approaches to an Acceptable Small Diameter Vascular Graft", ASAIO Transactions, 1988, pp. 88-94, Vol. 34.	
SH	178.	ZENG, L., et al., "Fibrin Sealant Matrix Supports Outgrowth of Peripheral Sensory Axons," Scand J. Plast. Reconstr. Hand Surg., 1995, pp. 199-204, vol. 29.	
SH	179.	ZÜND, G. et al., "Tissue engineering: A new approach in cardiovascular surgery; Seeding of human fibroblasts followed by human endothelial cells on resorbable mesh," European Journal of Cardio-thoracic Surgery, 1998, pp.160-164, vol. 13.	

Examiner Signature	/Susan Hanley/ (06/25/2006)	Date Considered	
--------------------	-----------------------------	-----------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.